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1. A compound of Formula I

Formula I

wherein R₁, R₂, R₃, R₄, R₅ are the same or different and each is hydrogen, halogen, alkyl of 1 to 24 carbon atoms, haloalkyl of 1 to 24 carbon atoms, aryl of 6 to 24 carbon atoms, alkenyl of 2 to 24 carbon atoms, acyl of 1 to 24 carbon atoms, aralkyl of 7 to 24 carbon atoms, aracyl of 6 to 24 carbon atoms, OR, NRR', CONRR', OCOR, CN, SR, SO₂R, SO₃H, SO₃M, wherein M is an alkali metal, R and R' are the same or different and each is hydrogen, alkyl of 1 to 24 carbon atoms, haloalkyl of 1 to 24 carbon atoms, aryl of 6 to 24 carbon atoms, alkenyl of 2 to 24 carbon atoms, acyl of 1 to 24 carbon atoms, cycloalkyl of 1 to 24 carbon atoms, cycloacyl of 5 to 24 carbon atoms, aralkyl of 7 to 24 carbon atoms, or aracyl of 6 to 24 carbons atoms, and optionally with either of R₁ and R₂, R₃ and R₄, or R₄ and R₅, taken together being a part of a saturated or unsaturated fused carbocyclic ring optionally containing O, N, or S atoms in the ring;

each of T and T' is independently a direct bond, oxygen, NR, sulfur or a functional groups containing these elements;

X is independently selected from hydrogen and a blocking group; each of Y, R₆ and R₇ are each independently hydrogen, hydrocarbyl group, a functional hydrocarbyl group, halogen, hydroxyl, cyano, -O(hydrocarbyl), -O(functional hydrocarbyl), -N(hydrocarbyl)2, -N(functional hydrocarbyl)2 -N(hydrocarbyl)(functional hydrocarbyl), -S(hydrocarbyl), -S(functional hydrocarbyl), -SO₂(hydrocarbyl), -SO₂(functional hydrocarbyl), -SO₃(hydrocarbyl), -SO₃(functional hydrocarbyl),

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-CO₂(hydrocarbyl), -CO₂(functional hydrocarbyl), -CO(hydrocarbyl), -CO(functional hydrocarbyl), -CO(hydrocarbyl), -CON(functional hydrocarbyl), -CONH₂, -CONH(hydrocarbyl), -CONH(functional hydrocarbyl), -CON(hydrocarbyl)₂, -CON(hydrocarbyl)(functional hydrocarbyl), -CON(functional hydrocarbyl)₂, wherein the hydrocarbyl or functional hydrocarbyl may be the same or different and has 1 to

Z is Y,

24 carbon atoms;

$$R_{5}$$
 R_{4}
 R_{7}
 R_{7}
 R_{8}
 R_{8}
 R_{1}
 R_{1}
 R_{2}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{4}
 R_{7}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{4}
 R_{5}
 R_{5}
 R_{4}
 R_{5}
 R_{5}
 R_{7}
 R_{6}
 R_{7}

and wherein L is hydrogen, a hydrocarbyl of 1 to 24 carbon atoms, or a functional hydrocarbyl of 1 to 24 atoms.

- 25 2. A compound according to claim 1 wherein T' is an oxygen atom and Y is L.
 - 3. A compound according to claim 2 wherein L is selected from the group consisting of: hydrogen; an alkyl of 1 to 24 carbon atoms optionally substituted by one or more hydroxy, alkoxy, carboxy, carboalkoxy, amino, amido, carbamato, or epoxy groups, and which may contain one or more carbonyl groups, oxygen atoms or nitrogen atoms in the chain; an alkenyl of 2 to 24 carbon atoms optionally substituted by one or more hydroxy, alkoxy, carboxy, carboalkoxy, amino, amido, carbamato, or epoxy groups, and which may contain one or more carbonyl groups, oxygen atoms or nitrogen atoms in the chain; an aralkyl of 7 to 24 carbon atoms optionally substituted by one or more hydroxy, alkoxy, chloro, cyano, carboxy, carboalkoxy, amino, amido, carbamato, or epoxy groups, and which



a polyoxyalkylene radical of the Formula XIII

$$-CO-(CH2)u-O-(CH2-(CH2)u-O-)mm-D2$$
(XIII)

wherein D_2 is $-(CH_2)_u$ -CO- R^{22} or R^{25} ;

a polyoxyalkylene radical of the Formula VIII 10

$$-YY - O - CO - (CH2)u - O - (CH2 - (CH2)u - O -)mm - D3$$
(XIV)

wherein D_3 is $-(CH_2)_u$ $-CO-R^{22}$ or R^{25} :

a polyoxyalkylene radical of the Formula XV

$$-(CH_2)_{kk}-CH(R^{21})-CO-B_1-(C_{nn}H_{2nn}-O-)_{mm}-C_{nn}H_{2nn}-B_1-D_4$$
 (XV)

wherein D_4 is hydrogen of R^{25} ; 15

a polyoxyalkylene radical of the Formula XVI

$$-CO-CH_2-CH_2-NH-(C_{nn}H_{2nn}-O-)_{mm}-C_{nn}H_{2nn}-D_5$$
(XVI)

wherein D_5 is —NH₂, —NH—(CH₂)₂—COO—R²³ or —O—R²⁵;

a polyoxyalkylene radical of the Formula XVII

a polyoxyarkyiene radioar of an
$$C_{nn}H_{2nn}$$
 $C_{nn}H_{2nn}$ $C_{nn}H_{2nn$

wherein D_5 is as defined under Formula (XVI);

a polyoxyalkylene radical of the Formula XVIII

a polyoxyalkylene radical of the Formula XVIII
$$-(C_{nn}H_{2nn}-O-)_{mm}-C_{nn}H_{2nn}-D_{6}$$
(XVIII)

wherein D_6 is —NH—CO— R^{24} , — OR^{25} , OH or H;

a polyoxyalkylene radical of the Formula XIX 25

$$-CH(R_{17})-CH_2-(OCH(R_{17})-CH_2)_m-D_7$$
(XIX)

wherein D_7 is $-OR^{25}$, $-NHCOR^{24}$ or $-OCH_2CH_2OR^{25}$;

R²¹ is hydrogen or C₁—C₁₆ alkyl;

R²² is halogen or —O—R²³;

 R^{23} is hydrogen, C_1 — C_6 alkyl, C_3 — C_6 alkenyl, aryl, or 30

arvl-C₁-C₄-alkyl;

R²⁴ is hydrogen, C₁—C₁₂ alkyl or aryl;

 C_1 — C_{12} alkylaryl or aryl— C_1 — C_4 alkyl;

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R²⁶ is hydrogen or C₁—C₄ alkyl;

 R^{27} is hydrogen, C_1 — C_{18} alkyl, C_3 — C_6 alkenyl, C_1 — C_{18} alkoxy, halogen or aryl— C_1 — C_4 —alkyl;

R²⁸ and R²⁹ independently of one another are hydrogen,

C₁—C₁₈ alkyl, C₃—C₆ alkenyl, C₁—C₁₈ alkoxy, or halogen;

R³⁰ is hydrogen, C₁—C₄ alkyl or CN;

YY is unsubstituted or substituted C2-C20 alkyl;

kk is zero or an integer from 1-16;

B₁ is O or NH;

10 mm is an integer from 2 to 60;

nn is an integer from 2 to 6;

u is an integer from 1 to 4.

4. A compound according to claim 4 wherein TZ is

 R_6 OL R_7

and wherein L is hydrogen, a hydrocarbyl group of 1 to 24 carbon atoms, or a functional hydrocarbyl group of 1 to 24 carbon atoms;

X is independently selected from hydrogen and a blocking group; and R₆ and R₇ are independently hydrogen, hydrocarbyl, functional hydrocarbyl, halogen, hydrocarbyl). O(hydrocarbyl) S(hydrocarbyl)

hydroxyl, —O(hydrocarbyl), —O(functional hydrocarbyl), —S(hydrocarbyl), —SO₂(hydrocarbyl), —COO(hydrocarbyl), —CO(hydrocarbyl), —CO(hydrocarbyl), —OCO(hydrocarbyl), —N(hydrocarbyl)(hydrocarbyl), —S(functional hydrocarbyl), —SO₂(functional hydrocarbyl), —COO(functional hydrocarbyl), —CO(functional hydrocarbyl), —CO(functional hydrocarbyl), —OCO(functional hydrocarbyl), —

N(functional hydrocarbyl)(functional hydrocarbyl) or cyano.

5. A compound according to claim 2 wherein R_1 to R_7 and X are hydrogen, and TZ is

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$$R_6$$
 OX
 OL

5 6. A compound according to claim 1 wherein TZ is:

$$R_5$$
 R_4
 R_2
 R_1

7. A compound according to claim 6 wherein T' is oxygen and Y is L

15 8. A compound according to claim 7 wherein R_1 to R_7 and X are hydrogen.

9. A compound of Formula VI:

$$R_{5}$$
 R_{4}
 R_{7}
 R_{7}
 R_{8}
 R_{4}
 R_{7}
 R_{8}
 R_{8}
 R_{1}
 R_{2}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{4}
 R_{5}
 R_{4}
 R_{7}

(Formula VI)

wherein T, Z, R_1 to R_7 , X are as defined in claim 1, and r is an integer between 2 and 4;

when r is 2, D is selected from the group consisting of C_2 — C_{16} alkyl, C_4 — C_{12} alkenyl, xylylene, C_3 — C_{20} alkyl which is interrupted by one or more oxygen atoms, hydroxy-



$$NH-CO-, -(CH_2)_s-COO-R^{18}-OCO-(CH_2)_s-$$

a polyoxyalkylene bridge member of the Formula XX

5 —
$$CH_2$$
— $CH(OH)$ — CH_2 — O — $(CH_2$ — $(CH_2)_u$ — O — $)_{mm}$ — CH_2 — $CH(OH)$ — CH_2 — (XX) ,

a polyoxyalkylene bridge member of the Formula XXI

$$-CO-(CH_2)_U-O-(CH_2-(CH_2)_U-O-)_{mm}-(CH_2)_U-CO-$$
 (XXI),

a polyoxyalkylene bridge member of the Formula XXII

$$\underline{\hspace{1cm}} YY \underline{\hspace{1cm}} O \underline{\hspace{1cm}} CO(CH_2)_u \underline{\hspace{1cm}} O \underline{\hspace{1cm}} (CH_2 \underline{\hspace{1cm}} (CH_2)_u \underline{\hspace{1cm}} O \underline{\hspace{1cm}})_{mm} \underline{\hspace{1cm}} (CH_2)_u \underline{\hspace{1cm}} COO \underline{\hspace{1cm}} YY \underline{\hspace{1cm}} (XXII),$$

10 a polyoxyalkylene bridge member of the Formula XXIII

$$-(CH_2)_{kk}-CH(R^{21})-CO-B_1-(C_{nn}H_{2nn}-O-)_{mm}C_{nn}H_{2nn}-B_1-CO-CH(R^{21})-(CH_2)_{kk}-(CH_2)_{kk}$$

a polyoxyalkylene bridge member of the Formula XXIV

$$-COC(R^{21})HCH_2NH(C_{nn}H_{2nn}O)_mC_{nn}H_{2nn}-NHCH_2-C(R^{21})HCO-$$

15 a polyoxyalkylene bridge member of the Formula XXV

$$-YY-O-CO-(CH_2)_2-NH-(C_{nn}H_{2nn}-O-)_{mm}-C_{nn}H_{2nn}-NH-(CH_2)_2$$
 $COO-YY-$
(XXV),

a polyoxyalkylene bridge member of the Formula XXVI

$$-(C_{nn}H_{2nn}-O-)_{mm}-C_{nn}H_{2nn}-$$
 (XXVI),

20 and a polyoxyalkylene bridge member of the Formula XXVII

$$-CH(CH_3)-CH_2-(O-CH(CH_3)-CH_2)_a-(O-CH_2-CH_2)_b-$$

$$(O-CH_2-CH(CH_3)_c-$$
 (XXVII),

wherein a + c = 2.5 and b = 8.5 to 40.5 or a + c = 2 to 33 and b = 0,

R²¹ is hydrogen or C₁—C₁₆ alkyl,

25 R^{22} is halogen or $-O-R^{23}$,

 R^{23} is hydrogen, C_1 — C_6 alkyl, C_3 — C_6 alkenyl, aryl, or aryl— C_1 — C_4 —alkyl,

R²⁴ is hydrogen, C₁—C₁₂ alkyl or aryl,

 R^{25} is C_1 — C_{16} alkyl, C_5 — C_{12} cycloalkyl, C_3 — C_6 alkenyl,

 C_1 — C_{12} alkylaryl or aryl— C_1 — C_4 alkyl,

30 R²⁶ is hydrogen or C₁—C₄ alkyl,

 R^{27} is hydrogen, C_1 — C_{18} alkyl, C_3 — C_6 alkenyl, C_1 — C_{18} alkoxy, halogen or aryl— C_1 — C_4 alkyl,

 R^{28} and R^{29} independently of one another are hydrogen, C_1 — C_{18} alkyl, C_3 — C_6 alkenyl, or

35 C₁—C₁₈ alkoxy, or halogen;

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 R^{30} is hydrogen, C_1 — C_4 alkyl or CN,

YY is unsubstituted or substituted C2-C20 alkyl,

kk is zero or an integer from 1-16,

B₁ is O or NH,

5 mm is an integer from 2 to 60,

nn is an integer from 2 to 6,

u is an integer from 1 to 4;

when r is 3, D is —[-(CH_2)_s—COO-]₃— R^{19}

and when r is 4, D is $--[-(CH_2)_s--COO-]_4--R^{20}$

wherein R^{19} is C_3 — C_{10} alkanetriyl and R^{20} is C_4 — C_{10} alkanetetryl; and s is 1-6;

 R^{15} is C_2 — C_{10} alkyl, C_2 — C_{10} oxaalkyl or C_2 — C_{10} dithiaalkyl, phenyl, naphthyl, diphenyl, or C_2 — C_6 alkenyl, or phenylene-XX-phenylene wherein XX is —O—, —S—, —SO₂—, —CH₂—, or —C(CH₃)₂—;

 R^{16} is C_2 — C_{10} alkyl, C_2 — C_{10} oxaalkyl or C_2 — C_{10} dithiaalkyl, phenyl, naphthyl, diphenyl, or C_2 — C_6 alkenyl provided that when r is 3 the alkenyl has at least 3 carbons;

 R^{17} is C_2 — C_{10} alkyl, phenyl, naphthyl, diphenyl, or C_2 — C_6 alkenyl, methylenediphenylene, or C_4 — C_{15} alkylphenyl, and

 R^{18} is C_2 — C_{10} alkyl, or C_4 — C_{20} alkyl interrupted by one or more oxygen atoms.

10. A compound of Formula (VII):

$$R_{5}$$
 R_{4}
 R_{7}
 R_{7}
 R_{7}
 R_{7}
 R_{7}
 R_{7}
 R_{7}
 R_{7}

35 (Formula VII)

wherein T, T', Y, Z, R_1 to R_7 , are as defined in claim 1; r is 2 or 3; when r is 2, X' is $-CO-R^{16}-CO-$, $-CO_2-R^{16}-CO_2-$, $-SO_2-R^{16}-SO_2-$, $-CO-NH-R^{17}-NH-CO-$, a polyoxyalkylene bridge member of Formula $-CO-(CH_2)_u-O-(CH_2-(CH_2)_u-O-)_{mm}-(CH_2)_u-CO-$, or $-COC(R^{21})HCH_2NH(C_{nn}H_{2nn}O)_mC_{nn}H_{2nn}-NHCH_2-C(R^{21})HCO-$

when r = 3, X' is: $-(-CO_2-R^{16})R^{19}, -(-CONH-R^{16})R^{19}, -(-SO_2-R^{16})R^{19}$

wherein R^{19} is C_3 — C_{10} alkanetriyl and R^{16} is C_2 — C_{10} alkyl, C_2 — C_{10} oxaalkyl or C_2 — C_{10} dithiaalkyl, phenyl, naphthyl, diphenyl, or C_2 — C_6 alkenyl provided that when r is 3 the alkenyl has at least 3 carbons;

 R^{17} is C_2 — C_{10} alkyl, phenyl, naphthyl, diphenyl, or C_2 — C_6 alkenyl, methylenediphenylene, or C_4 — C_{15} alkylphenyl; and

15 R^{18} is C_2 — C_{10} alkyl, or C_4 — C_{20} alkyl interrupted by one or more oxygen atoms; and R^{21} is hydrogen or C_1 — C_{16} alkyl.

11. A compound of Formula (VIII):

20 $R_{5} \longrightarrow R_{4}$ $R_{2} \longrightarrow R_{1}$ $R_{6} \longrightarrow R_{7}$ $R_{7} \longrightarrow R_{4}$ $R_{7} \longrightarrow R_{4}$ $R_{7} \longrightarrow R_{4}$

wherein T, T', Y, Z, R_1 to R_5 , R_7 and X, are as defined in claim 1;

(Formula VIII)

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 R_6 is selected from the group consisting of straight chain alkyl of 1 to 12 carbon atoms, branched chain alkyl of 1 to 12 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, alkyl substituted by cyclohexyl, alkyl interrupted by cyclohexyl, alkyl substituted by phenylene, alkyl interrupted by phenylene, benzylidene, —S—, —S—S—, —S— E—S—, —SO—, —SO₂—,

$$E=S=-$$
, $=SO=-$, $=SO_2=-$, $=SO=-$ SO $=-$

$$CH_3$$
 CH_3
 CH_3

wherein E is selected from the group consisting of alkyl of 2 to 12 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, alkyl interrupted by cyclohexyl of 8 to 12 carbon atoms, alkyl terminated by cyclohexyl of 8 to 12 carbon atoms; and

12. A compound of Formula IX

r is an integer between 2 and 4

$$R_5$$
 R_4
 R_7
 R_7
 R_7
 R_7
 R_7
 R_7
 R_7
 R_7
 R_7

wherein T, T' Y, X, and R_1 to R_7 are defined as in claim 1; r is an integer between 2 and 4; when r is 2, D is selected from the group consisting of C_2 — C_{16} alkylene, C_4 —

C₁₂alkenylene, xylylene, C₃—C₂₀alkylene which is interrupted by one or more oxygen

atoms, hydroxy-substituted C_3 — C_{20} alkylene which is interrupted by one or more oxygen atoms, — $CH_2CH(OH)CH_2O$ — R^{15} — $OCH_2CH(OH)CH_2$, —CO— R^{16} —CO—, — CO—NH— R^{17} —NH—CO—, and — $(CH_2)_s$ —COO— R^{18} —OCO— $(CH_2)_s$ —; and

5 when r is 3, D is $-[-(CH_2)_s-COO-]_3-R^{19}$ and when r is 4, D is $-[-(CH_2)_s-COO-]_4-R^{20}$

wherein R^{19} is C_3 — C_{10} alkanetriyl and R^{20} is C_4 — C_{10} alkanetetryl; s is 1-6;

10 R¹⁵ is C₂—C₁₀ alkylene phenylene or a phenylene-x-phenylene- group, wherein X is —O—, —S—, —SO₂—, —CH₂—, or —C(CH₃)₂—; R¹⁶ is C₂—C₁₀ alkylene, C₂—C₁₀ oxaalkylene or C₂—C₁₀ dithiaalkylene, phenylene, naphthylene, diphenylene or C₂—C₆ alkenylene; R¹⁷ is C₂—C₁₀ alkylene, phenylene, naphthylene, methylenediphenylene or C₇—C₁₅ alkylphenylene, and

 R^{18} is C_2 — C_{10} alkylene or C_4 — C_{20} alkylene which is interrupted by one or more oxygen atoms.

- 13. A method of stabilizing a material which is subject to degradation by actinic radiation by incorporating said material with the compound of claim 1.
 - 14. The method of claim 13, wherein the amount of the said compound of claim 1 is from about 0.01 to about 20 % by weight based on the weight of the material to be stabilized.
- The method of claim 13, wherein the material to be stabilized is selected from the group consisting of polyolefins, polyesters, polyethers, polyketones, polyamides, natural and synthetic rubbers, polyurethanes, polystyrenes, high-impact polystyrenes, polyacrylates, polymethacrylates, polyacetals, polyacrylonitriles, polybutadienes, polystyrenes, ABS, SAN (styrene acrylonitrile), ASA (acrylate styrene acrylonitrile), cellulosic acetate butyrate,
- 30 cellulosic polymers, polyimides, polyamideimides, polyetherimides, polyphenylsulfide, PPO, polysulfones, polyethersulfones, polyvinylchlorides, polycarbonates, polyketones, aliphatic polyketones, thermoplastic TPU's, aminoresin cross-linked polyacrylates and polyesters, or polyisocyanate cross-linked polyesters and polyacrylates, phenol/formaldehyde, urea/formaldehyde and melamine/formaldehyde resins, drying and non-drying alkyd resins,
- 35 alkyd resins, polyester resins, acrylate resins cross-linked with melamine resins, urea resins,

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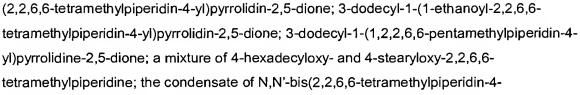
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isocyanates, isocyanurates, carbamates, and epoxy resins, cross-linked epoxy resins derived from aliphatic, cycloaliphatic, heterocyclic and aromatic glycidyl compounds, which are cross-linked with anhydrides or amines, polysiloxanes, Michael addition polymers, amines, blocked amines with activated unsaturated and methylene compounds, ketimines with activated unsaturated and methylene compounds, polyketimines in combination with unsaturated acrylic polyacetoacetate resins, polyketimines in combination with unsaturated acrylic resins, radiation curable compositions, epoxymelamine resins, organic dyes, cosmetic products, cellulose-based paper formulations, photographic film paper, ink, fibers and combinations thereof.

- 16. The method of claim 15, wherein the material is a polyolefin, polyamide, polyurethane, polyester or a polycarbonate.
- 17. The method of claim 13 further comprising incorporation of one or more hindered amine light stabilizers.
- 18. The method according to claim 17, wherein said hindered amine comprises at least one member of the group consisting of: bis(2,2,6,6-tetramethylpiperidin-4-yl) sebacate; bis(2,2,6,6-tetramethylpiperidin-4-yl)succinate; bis(1,2,2,6,6-pentamethylpiperidin-4-20 yl)sebacate; bis(1-octyloxy-2,2,6,6-tetramethylpiperidin-4-yl)sebacate; bis(1,2,2,6,6pentamethylpiperidin-4-yl) n-butyl 3,5-di-tert-butyl-4-hydroxybenzylmalonate; the condensate of 1-(2-hydroxyethyl)-2,2,6,6-tetramethyl-4-hydroxypiperidine and succinic acid; the condensate of N,N'-bis(2,2,6,6-tetramethylpiperidin-4-yl)hexamethylenediamine and 4-tertoctylamino-2,6-dichloro-1,3,5-triazine; tris(2,2,6,6-tetramethylpiperidin-4-yl) nitrilotriacetate; 25 tetrakis(2,2,6,6-tetramethylpiperidin-4-yl)- 1,2,3,4-butanetetracarboxylate; 1,1'-(1,2ethanediyl)bis(3,3,5,5-tetramethylpiperazinone); 4-benzoyl-2,2,6,6-tetramethylpiperidine; 4stearyloxy-2,2,6,6-tetramethylpiperidine; bis(1,2,2,6,6-pentamethylpiperidyl)-2-n-butyl-2-(2hydroxy-3,5-di-tert-butylbenzyl)malonate; 3-n-octyl-7,7,9,9-tetramethyl-1,3,8triazaspiro[4.5]decan-2,4-dione; bis(1-octyloxy-2,2,6,6-tetramethylpiperidyl)sebacate; bis(1-30 octyloxy-2,2,6,6-tetramethylpiperidyl)succinate; the condensate of N,N'-bis(2,2,6,6tetramethylpiperidin-4-yl)hexamethylenediamine and 4-morpholino-2,6-dichloro-1,3,5-triazine; the condensate of 2-chloro-4,6-bis(4-n-butylamino-2,2,6,6-tetramethylpiperidyl)-1,3,5-triazine and 1,2-bis(3-aminopropylamino)ethane; the condensate of 2-chloro-4,6-bis(4-n-butylamino-1,2,2,6,6-pentamethylpiperidyl)-1,3,5-triazine and 1,2-bis-(3- aminopropylamino)ethane; 8-35 acetyl-3-dodecyl-7,7,9,9-tetramethyl-1,3,8-triazaspiro[4.5]decane-2,4-dione; 3-dodecyl-1-

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yl)hexamethylenediamine and 4-cyclohexylamino-2,6-dichloro-1,3,5-triazine; the condensate of 1,2-bis(3-aminopropylamino)ethane, 2,4,6-trichloro-1,3,5-triazine and 4-butylamino-2,2,6,6-tetramethylpiperidine; 2-undecyl-7,7,9,9-tetramethyl-1-oxa-3,8-diaza-4-oxospiro[4.5]decane; oxo-piperanzinyl-triazines; and the reaction product of 7,7,9,9-tetramethyl-2-cycloundecyl-1-oxa-3,8-diaza-4-oxospiro[4.5]decane and epichlorohydrin.

19. The method according to claim 13 further comprising incorporation of one or more additional UV absorbers wherein the additional UV absorber is a benzotriazole derivative, a triazine derivative, a benzophenone derivative, or a combination thereof.

- 15 20. A method of stabilizing a material which is subject to degradation by actinic radiation by incorporating said material with the compound of claims 9, 10, 11 or 12.
 - 21. A composition comprising
 - (a) the compound of claim 1; and
- 20 (b) at least one other additive selected from group consisting of: UV stabilizers and antioxidants.
 - 22. The composition of claim 21 wherein said at least one other additive is selected from the group consisting of 2-(2'-hydroxyphenyl)benzotriazoles, oxamides, 2-(2-hydroxphenyl)-1,3,5-triazines, 2-hydroxybenzophenones, sterically hindered amines and hindered phenol antioxidants.
 - 23. The composition of claim 22 wherein said at least other additive is selected from the group consisting of: 2-(2'-hydroxy-5'-methylphenyl)-benzotriazole; 2-(3',5'-di-tert-butyl-2'-hydroxyphenyl)benzotriazole; 2-(2'-hydroxy-5'-di-tert-butyl-2'-hydroxyphenyl)benzotriazole; 2-(2'-hydroxy-5'-di-tert-butyl-2'-hydroxyphenyl)benzotriazole; 2-(2'-hydroxy-5'-di-tert-butyl-2'-hydroxyphenyl)benzotriazole; 2-(2'-hydroxy-5'-di-tert-butyl-2'-hydroxyphenyl)benzotriazole; 2-(2'-hydroxy-5'-di-tert-butyl-2'-d
- (1,1,3,3-tetramethylbutyl)phenyl)benzotriazole; 2-(3',5'-di-tert-butyl-2'-hydroxyphenyl)-5-chlorobenzotriazole; 2-(3'-tert-butyl-2'-hydroxy-5'-methylphenyl)-5-chloro-benzotriazole; 2-(3'-sec-butyl-5'-tert-butyl-2'-hydroxyphenyl)-benzotriazole; 2-(2'-hydroxy-4'-octoxyphenyl)benzotriazole; 2-(3',5'-di-tert-amyl-2'-hydroxphenyl)benzotriazole; 2-(3',5'-di-tert-amyl-2'-di-tert-amyl-2'-hydroxphenyl)benzotriazole; 2-(3',5'-di-tert-amyl-2'-hydroxphenyl)benzotr
- 35 bis(α,α -dimethylbenzyl)-2'-hydroxyphenyl)-benzotriazole; a mixture of 2-(3'-tert-butyl-2'-

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hydroxy-5'-(2-octyloxycarbonylethyl)phenyl)-5-chloro-benzotriazole, 2-(3'-tert-butyl-5'-[2-(2ethylhexyloxy)-carbonylethyl]-2'-hydroxyphenyl)-5-chloro-benzotriazole, 2-(3'-tert-butyl-2'hydroxy-5'-(2-methoxycarbonylethyl)phenyl)-5-chloro-benzotriazole, 2-(3'-tert-butyl-2'hydroxy-5'-(2-methoxycarbonylethyl)phenyl)benzotriazole, 2-(3'-tert-butyl-2'-hydroxy-5'-(2octyloxycarbonylethyl)phenyl)benzotriazole, 2-(3'-tert-butyl-5'-[2-(2ethylhexyloxy)carbonylethyl]-2'-hydroxyphenyl)benzotriazole, 2-(3'-dodecyl-2'-hydroxy-5'methylphenyl)benzotriazole and 2-(3'-tert-butyl-2'-hydroxy-5'-(2isooctyloxycarbonylethyl)phenylbenzotriazole; 2,2-methylenebis[4-(1,1,3,3-tetramethylbutyl)-6-benzotriazol-2-ylphenol], the transesterification product of 2-[3'-tert-butyl-5'-(2methoxycarbonylethyl)-2'-hydroxyphenyl]benzotriazole with polyethylene glycol 300; [R— CH_2CH — $COO(CH_2)_3]_2$ B where R = 3'-tert-butyl-4'-hydroxy-5'-2H-benzotriazol-2-ylphenyl; bis(2,2,6,6-tetramethylpiperidin-4-yl) sebacate; bis(2,2,6,6-tetramethylpiperidin-4yl)succinate; bis(1,2,2,6,6-pentamethylpiperidin-4-yl)sebacate; bis(1-octyloxy-2,2,6,6tetramethylpiperidin-4-yl)sebacate; bis(1,2,2,6,6-pentamethylpiperidin-4-yl) n-butyl 3,5-di-tertbutyl-4-hydroxybenzylmalonate; the condensate of 1-(2-hydroxyethyl)-2,2,6,6-tetramethyl-4hydroxypiperidine and succinic acid; the condensate of N,N'-bis(2,2,6,6-tetramethylpiperidin-4-yl)hexamethylenediamine and 4-tert-octylamino-2,6-dichloro-1,3,5-triazine; tris(2,2,6,6tetramethylpiperidin-4-yl) nitrilotriacetate; tetrakis(2,2,6,6-tetramethylpiperidin-4-yl)- 1,2,3,4butanetetracarboxylate; 1,1'-(1,2-ethanediyl)bis(3,3,5,5-tetramethylpiperazinone); 4-benzoyl-2,2,6,6-tetramethylpiperidine; 4-stearyloxy-2,2,6,6-tetramethylpiperidine; bis(1,2,2,6,6pentamethylpiperidyl)-2-n-butyl-2-(2-hydroxy-3,5-di-tert-butylbenzyl)malonate; 3-n-octyl-7.7.9.9-tetramethyl-1,3,8-triazaspiro[4.5]decan-2,4-dione; bis(1-octyloxy-2,2,6,6tetramethylpiperidyl)sebacate; bis(1-octyloxy-2,2,6,6-tetramethylpiperidyl)succinate; the condensate of N,N'-bis(2,2,6,6-tetramethylpiperidin-4-yl)hexamethylenediamine and 4morpholino-2,6-dichloro-1,3,5-triazine; the condensate of 2-chloro-4,6-bis(4-n-butylamino-2.2.6.6-tetramethylpiperidyl)-1,3,5-triazine and 1,2-bis(3-aminopropylamino)ethane; the condensate of 2-chloro-4,6-bis(4-n-butylamino-1,2,2,6,6-pentamethylpiperidyl)-1,3,5-triazine and 1,2-bis-(3- aminopropylamino)ethane; 8-acetyl-3-dodecyl-7,7,9,9-tetramethyl-1,3,8triazaspiro[4.5]decane-2,4-dione; 3-dodecyl-1-(2,2,6,6-tetramethylpiperidin-4-yl)pyrrolidin-2,5dione; 3-dodecyl-1-(1-ethanoyl-2,2,6,6-tetramethylpiperidin-4-yl)pyrrolidin-2,5-dione; 3dodecyl-1-(1,2,2,6,6-pentamethylpiperidin-4-yl)pyrrolidine-2,5-dione; a mixture of 4hexadecyloxy- and 4-stearyloxy-2,2,6,6-tetramethylpiperidine; the condensate of N,N'bis(2,2,6,6-tetramethylpiperidin-4-yl)hexamethylenediamine and 4-cyclohexylamino-2,6dichloro-1,3,5-triazine; the condensate of 1,2-bis(3-aminopropylamino)ethane, 2,4,6-trichloro-1,3,5-triazine and 4-butylamino-2,2,6,6-tetramethylpiperidine; 2-undecyl-7,7,9,9-tetramethyl-



1-oxa-3,8-diaza-4-oxospiro[4.5]decane; oxo-piperanzinyl-triazines and the reaction product of 7,7,9,9-tetramethyl-2-cycloundecyl-1-oxa-3,8-diaza-4-oxospiro[4.5]decane and epichlorohydrin;

- 2,4,6-tris(2-hydroxy-4-octyloxyphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-n-octyloxyphenyl)-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-(mixed iso-octyloxyphenyl)-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2,4-dihydroxyphenyl)-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-propyloxyphenyl)-6-(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-octyloxyphenyl)-4,6-bis(4-methylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-dodecyloxyphenyl)-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-
- tridecyloxyphenyl)-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-[2-hydroxy-4-(2-hydroxy-3-butyloxypropyloxy)phenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-[2-hydroxy-4-(2-hydroxy-3-octyloxypropyloxy)-phenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-[4-dodecyloxy/tridecyloxy-2-hydroxypropoxy)-2-hydroxyphenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-[2-hydroxy-4-(2-hydroxy-3-dodecyloxypropoxy)phenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-[2-hydroxy-4-(2-hydr
- dimethylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-hexyloxy)phenyl-4,6-diphenyl-1,3,5-triazine; 2-(2-hydroxy-4-methoxyphenyl)-4,6-diphenyl-1,3,5-triazine; 2,4,6-tris[2-hydroxy-4-(3-butoxy-2-hydroxypropoxy)phenyl]-1,3,5-triazine; 2-(2-hydroxyphenyl)-4-(4-methoxyphenyl)-6-phenyl-1,3,5-triazine, 2,4-dihydroxybenzophenone; 2-hydroxy-4-methoxybenzophenone; 2-hydroxy-4-octyloxybenzophenone; 2-hydroxy-4-decyloxybenzophenone; 2-hydroxy-4-
- dodecyloxybenzophenone; 2-hydroxy-4-benzyloxybenzophenone, 4,2',4-trishydroxybenzophenone; 2'-hydroxy-4,4'-dimethoxybenzophenone; 1,3,5-tris(2,6-dimethyl-4-tert-butyl-3hydroxybenzyl)isocyanurate; 1,3,5-tris(3,5-di-tert-butyl-4-hydroxybenzyl) -2,4,6-trimethylbenzene; 2,6-di-tert-butyl-4-methylphenol; 2,2'-ethylidene-bis(4,6-di-tert-butylphenol);
- 1,1,3-tris(5-tert-butyl-4-hydroxy-2-methylphenyl)butane; esters of β-(3,5-di-tert-butyl-4-hydroxyphenyl)propionic acid with mono- or polyhydric alcohols; esters of β-(5-tert-butyl-4-hydroxy-3-methylphenyl)propionic acid with mono- or polyhydric alcohols; dimethyl-2,5-di-tert-butyl-4-hydroxybenzylphosphonate; diethyl-3,5-di-tert-butyl-4-hydroxybenzylphosphonate; dioctadecyl-3,5-di-tert-butyl-4-hydroxybenzylphosphonate;
 dioctadecyl-5-tert-butyl-4-hydroxy-3-methylbenzylphosphonate; and the calcium salt of the
 - monoethyl ester of 3,5-di-tert-butyl-4-hydroxybenzylphosphonic acid; amides of ß-(3,5-di-tert-butyl-4-hydroxybenzylphosphonic acid; amides of ß-(3,5-di-tert-butyl-4-hydroxyphenyl)propionic acid such as N,N'-bis(3,5-di-tert-butyl-4-hydroxyphenylpropionyl)hexamethylenediamine; N,N'-bis(3,5-di-tert-butyl-4-hydroxyphenylpropionyl)trimethylenediamine; and N,N'-bis(3,5-di-tert-butyl-4-
- 35 hydroxyphenylpropionyl)hydrazine.

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24. The composition of claim 23 wherein TZ is

and T' is oxygen, Y is L and R_1 to R_7 and X are hydrogen.

10 25. The composition of claim 23 wherein TZ is:

$$R_5$$
 R_4
 R_2
 R_1

and T' is oxygen, Y is L and R₁ to R₇ and X are hydrogen.

26. The composition of claim 21 further comprising a material to be stabilized selected from the group consisting of: polyolefins, polyesters, polyethers, polyketones, polyamides, natural and synthetic rubbers, polyurethanes, polystyrenes, high-impact polystyrenes, polyacrylates, polymethacrylates, polyacetals, polyacrylonitriles, polybutadienes, polystyrenes, ABS, styrene acrylonitrile, acrylate styrene acrylonitrile, cellulosic acetate butyrate, cellulosic polymers, polyimides, polyamideimides, polyetherimides, polyphenylsulfides, polyphenylene oxide, polysulfones, polyethersulfones, polyvinylchlorides, polycarbonates, polyketones, aliphatic polyketones, thermoplastic TPO's, aminoresin crosslinked polyacrylates and polyesters, polyisocyanate cross-linked polyesters and polyacrylates, phenol/formaldehyde, urea/formaldehyde and melamine/formaldehyde resins, drying and non-drying alkyd resins, alkyd resins, polyester resins, acrylate resins cross-linked with melamine resins, urea resins, isocyanates, isocyanurates, carbamates, epoxy resins, cross-linked epoxy resins derived from aliphatic, cycloaliphatic, heterocyclic and aromatic glycidyl compounds, which are cross-linked with anhydrides or amines, polysiloxanes, Michael addition polymers, amines, blocked amines with activated unsaturated and methylene compounds, ketimines with activated unsaturated and methylene compounds,



polyketimines in combination with unsaturated acrylic polyacetoacetate resins, polyketimines in combination with unsaturated acrylic resins, radiation curable compositions, epoxymelamine resins, organic dyes, cosmetic products, cellulose-based paper formulations, photographic film paper, ink, and mixtures thereof.

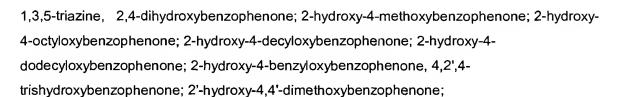
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- 27. The composition of claim 21 wherein the amount of said compound of claim 1 to said at least one other additive if from about 500:1 to about 1:500 by weight.
- 28. A composition comprising
- 10
- (a) the compound of claims 9, 10, 11 or 12; and
- (b) at least one other additive selected from group consisting of: 2-(2'-hydroxy-5'-methylphenyl)-benzotriazole; 2-(3',5'-di-tert-butyl-2'-hydroxyphenyl)benzotriazole; 2-(5'-tert-butyl-2'-hydroxyphenyl)benzotriazole; 2-(2'-hydroxy-5'-(1,1,3,3-tetramethylbutyl)phenyl)benzotriazole; 2-(3',5'-di-tert-butyl-2'-hydroxyphenyl)-5-chloro-benzotriazole; 2-(3'-tert-butyl-2'-hydroxy-5'-methylphenyl)-5-chloro-benzotriazole; 2-(3'-sec-butyl-5'-tert-butyl-2'-hydroxyphenyl)-benzotriazole; 2-(2'-hydroxy-4'-octoxyphenyl)benzotriazole; 2-(3',5'-di-tert-amyl-2'-hydroxphenyl)benzotriazole; 2-(3',5'-bis(α,α-dimethylbenzyl)-2'-hydroxyphenyl)-benzotriazole; a mixture of 2-(3'-tert-butyl-2'-hydroxy-5'-(2-octyloxycarbonylethyl)phenyl)-5-chloro-benzotriazole, 2-(3'-tert-butyl-5'-[2-(2-bydroxy-5'-(2-octyloxycarbonylethyl)phenyl)-5-chloro-benzotriazole, 2-(3'-tert-butyl-5'-[2-(2-octyloxycarbonylethyl)phenyl)-5-chloro-benzotriazole, 2-(3'-tert-butyl-5'-[2-(2-octyloxycarbonylethyl)phenyl)-5-chloro-benzotriazole, 2-(3
- ethylhexyloxy)-carbonylethyl]-2'-hydroxyphenyl)-5-chloro-benzotriazole, 2-(3'-tert-butyl-2'-hydroxy-5'-(2-methoxycarbonylethyl)phenyl)-5-chloro-benzotriazole, 2-(3'-tert-butyl-2'-hydroxy-5'-(2-methoxycarbonylethyl)phenyl)benzotriazole, 2-(3'-tert-butyl-2'-hydroxy-5'-(2-octyloxycarbonylethyl)phenyl)benzotriazole, 2-(3'-tert-butyl-5'-[2-(2-ethylhexyloxy)carbonylethyl]-2'-hydroxyphenyl)benzotriazole, 2-(3'-dodecyl-2'-hydroxy-5'-
- methylphenyl)benzotriazole and 2-(3'-tert-butyl-2'-hydroxy-5'-(2-isooctyloxycarbonylethyl)phenylbenzotriazole; 2,2-methylenebis[4-(1,1,3,3-tetramethylbutyl)-6-benzotriazol-2-ylphenol], the transesterification product of 2-[3'-tert-butyl-5'-(2-methoxycarbonylethyl)-2'-hydroxyphenyl]benzotriazole with polyethylene glycol 300; [R—
- CH₂CH—COO(CH₂)₃]₂ B where R = 3'-tert-butyl-4'-hydroxy-5'-2H-benzotriazol-2-ylphenyl;
 bis(2,2,6,6-tetramethylpiperidin-4-yl) sebacate; bis(2,2,6,6-tetramethylpiperidin-4-yl)succinate; bis(1,2,2,6,6-pentamethylpiperidin-4-yl)sebacate; bis(1-octyloxy-2,2,6,6-tetramethylpiperidin-4-yl)sebacate; bis(1,2,2,6,6-pentamethylpiperidin-4-yl) n-butyl 3,5-di-tert-butyl-4-hydroxybenzylmalonate; the condensate of 1-(2-hydroxyethyl)-2,2,6,6-tetramethyl-4-hydroxypiperidine and succinic acid; the condensate of N,N'-bis(2,2,6,6-tetramethylpiperidin-4-yl)hexamethylenediamine and 4-tert-octylamino-2,6-dichloro-1,3,5-triazine; tris(2,2,6,6-tetramethylpiperidin-4-yl)hexamethylenediamine and 4-tert-octylamino-2,6-dichlo

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tetramethylpiperidin-4-yl) nitrilotriacetate; tetrakis(2,2,6,6-tetramethylpiperidin-4-yl)-1,2,3,4butanetetracarboxylate; 1,1'-(1,2-ethanediyl)bis(3,3,5,5-tetramethylpiperazinone); 4-benzoyl-2,2,6,6-tetramethylpiperidine; 4-stearyloxy-2,2,6,6-tetramethylpiperidine; bis(1,2,2,6,6pentamethylpiperidyl)-2-n-butyl-2-(2-hydroxy-3,5-di-tert-butylbenzyl)malonate; 3-n-octyl-5 7,7,9,9-tetramethyl-1,3,8-triazaspiro[4.5]decan-2,4-dione; bis(1-octyloxy-2,2,6,6tetramethylpiperidyl)sebacate; bis(1-octyloxy-2,2,6,6-tetramethylpiperidyl)succinate; the condensate of N,N'-bis(2,2,6,6-tetramethylpiperidin-4-yl)hexamethylpiperidin-4-yl)hexamethylpiperidin-4-yl morpholino-2,6-dichloro-1,3,5-triazine; the condensate of 2-chloro-4,6-bis(4-n-butylamino-2,2,6,6-tetramethylpiperidyl)-1,3,5-triazine and 1,2-bis(3-aminopropylamino)ethane; the 10 condensate of 2-chloro-4,6-bis(4-n-butylamino-1,2,2,6,6-pentamethylpiperidyl)-1,3,5-triazine and 1,2-bis-(3- aminopropylamino)ethane; 8-acetyl-3-dodecyl-7,7,9,9-tetramethyl-1,3,8triazaspiro[4.5]decane-2,4-dione; 3-dodecyl-1-(2,2,6,6-tetramethylpiperidin-4-yl)pyrrolidin-2,5dione; 3-dodecyl-1-(1-ethanoyl-2,2,6,6-tetramethylpiperidin-4-yl)pyrrolidin-2,5-dione; 3dodecyl-1-(1,2,2,6,6-pentamethylpiperidin-4-yl)pyrrolidine-2,5-dione; a mixture of 4-15 hexadecyloxy- and 4-stearyloxy-2,2,6,6-tetramethylpiperidine; the condensate of N,N'bis(2,2,6,6-tetramethylpiperidin-4-yl)hexamethylenediamine and 4-cyclohexylamino-2,6dichloro-1,3,5-triazine; the condensate of 1,2-bis(3-aminopropylamino)ethane, 2,4,6-trichloro-1,3,5-triazine and 4-butylamino-2,2,6,6-tetramethylpiperidine; 2-undecyl-7,7,9,9-tetramethyl-1-oxa-3,8-diaza-4-oxospiro[4.5]decane; oxo-piperanzinyl-triazines and the reaction product of 20 7,7,9,9-tetramethyl-2-cycloundecyl-1-oxa-3,8-diaza-4-oxospiro[4.5]decane and epichlorohydrin; 2,4,6-tris(2-hydroxy-4-octyloxyphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-n-octyloxyphenyl)-4,6bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-(mixed iso-octyloxyphenyl)-4,6-bis(2,4dimethylphenyl)-1,3,5-triazine; 2-(2,4-dihydroxyphenyl)-4,6-bis(2,4-dimethylphenyl)-1,3,5-25 triazine; 2,4-bis(2-hydroxy-4-propyloxyphenyl)-6-(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2-

hydroxy-4-octyloxyphenyl)-4,6-bis(4-methylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-dodecyloxyphenyl)-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-tridecyloxyphenyl)-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-[2-hydroxy-4-(2-hydroxy-3-butyloxypropyloxy)phenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-[2-hydroxy-4-(2-hydroxy-4-(2-hydroxy-3-octyloxypropyloxy)-phenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-[4-dodecyloxy/tridecyloxy-2-hydroxypropoxy)-2-hydroxyphenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-[2-hydroxy-4-(2-hydroxy-3-dodecyloxypropoxy)phenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine; 2-(2-hydroxy-4-hexyloxy)phenyl-4,6-diphenyl-1,3,5-triazine; 2-(2-hydroxy-4-methoxyphenyl)-4,6-diphenyl-1,3,5-triazine; 2-(2-hydroxy-4-methoxyphenyl)-4,6-diphenyl-1,3,5-triazine; 2-(2-hydroxyphenyl)-4-(4-methoxyphenyl)-6-phenyl-hydroxypropoxy)phenyl]-1,3,5-triazine; 2-(2-hydroxyphenyl)-4-(4-methoxyphenyl)-6-phenyl-hydroxypropoxy)phenyl]-1,3,5-triazine; 2-(2-hydroxyphenyl)-4-(4-methoxyphenyl)-6-phenyl-hydroxypropoxy)phenyl]-1,3,5-triazine; 2-(2-hydroxyphenyl)-4-(4-methoxyphenyl)-6-phenyl-hydroxypropoxy)phenyl]-1,3,5-triazine; 2-(2-hydroxyphenyl)-4-(4-methoxyphenyl)-6-phenyl-hydroxypropoxy)phenyl]-1,3,5-triazine; 2-(2-hydroxyphenyl)-4-(4-methoxyphenyl)-6-phenyl-hydroxypropoxy)phenyl]-1,3,5-triazine; 2-(2-hydroxyphenyl)-4-(4-methoxyphenyl)-6-phenyl-hydroxypropoxy)phenyl



- 1,3,5-tris(2,6-dimethyl-4-tert-butyl-3hydroxybenzyl)isocyanurate; 1,3,5-tris(3,5-di-tert-butyl-4-hydroxybenzyl) -2,4,6-trimethylbenzene; 2,6-di-tert-butyl-4-methylphenol; 2,2'-ethylidene-bis(4,6-di-tert-butyl-4-hydroxy-2-methylphenyl)butane; esters of β-(3,5-di-tert-butyl-4-hydroxy-4
- esters of ß-(5-tert-butyl-4-hydroxy-3-methylphenyl)propionic acid with mono- or polyhydric alcohols; dimethyl-2,5-di-tert-butyl-4-hydroxybenzylphosphonate; diethyl-3,5-di-tert-butyl-4-hydroxybenzylphosphonate; dioctadecyl-3,5-di-tert-butyl-4-hydroxybenzylphosphonate; dioctadecyl-5-tert-butyl-4-hydroxy-3-methylbenzylphosphonate; and the calcium salt of the monoethyl ester of 3,5-di-tert-butyl-4-hydroxybenzylphosphonic acid; amides of ß-(3,5-di-tert-butyl-4-hydroxyphenyl)propionic acid such as N,N'-bis(3,5-di-tert-butyl-4-hydroxyphenylpropionyl)hexamethylenediamine; N,N'-bis(3,5-di-tert-butyl-4-hydroxyphenylpropionyl)trimethylenediamine; and N,N'-bis(3,5-di-tert-butyl-4-hydroxyphenylpropionyl)hydrazine.
 - 29. The composition of claim 28 wherein the amount of said compound to said at least one other additive if from about 500:1 to about 1:500 by weight.
- 30. The composition of claim 28 further comprising a material to be stabilized selected from the group consisting of polyolefins, polyesters, polyethers, polyketones, polyamides, 25 natural and synthetic rubbers, polyurethanes, polystyrenes, high-impact polystyrenes, polyacrylates, polymethacrylates, polyacetals, polyacrylonitriles, polybutadienes, polystyrenes, ABS, SAN (styrene acrylonitrile), ASA (acrylate styrene acrylonitrile), cellulosic acetate butyrate, cellulosic polymers, polyimides, polyamideimides, polyetherimides, polyphenylsulfide, PPO, polysulfones, polyethersulfones, polyvinylchlorides, polycarbonates, 30 polyketones, aliphatic polyketones, thermoplastic TPU's, aminoresin cross-linked polyacrylates and polyesters, or polyisocyanate cross-linked polyesters and polyacrylates, phenol/formaldehyde, urea/formaldehyde and melamine/formaldehyde resins, drying and non-drying alkyd resins, alkyd resins, polyester resins, acrylate resins cross-linked with melamine resins, urea resins, isocyanates, isocyanurates, carbamates, and epoxy resins, 35 cross-linked epoxy resins derived from aliphatic, cycloaliphatic, heterocyclic and aromatic

glycidyl compounds, which are cross-linked with anhydrides or amines, polysiloxanes, Michael addition polymers, amines, blocked amines with activated unsaturated and methylene compounds, ketimines with activated unsaturated and methylene compounds, polyketimines in combination with unsaturated acrylic polyacetoacetate resins, polyketimines in combination with unsaturated acrylic resins, radiation curable compositions, epoxymelamine resins, organic dyes, cosmetic products, cellulose-based paper formulations, photographic film paper, ink, fibers and combinations thereof.

31. A compound having the Formula

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$$R_{5}$$
 R_{3}
 R_{2}
 R_{1}
 R_{2}
 R_{1}

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wherein R₁, R₂, R₃, R₄, R₅ are the same or different and each is hydrogen, halogen, alkyl of 1 to 24 carbon atoms, haloalkyl of 1 to 24 carbon atoms, aryl of 6 to 24 carbon atoms, alkenyl of 2 to 24 carbon atoms, acyl of 1 to 24 carbon atoms, aralkyl of 7 to 24 carbon atoms, aracyl of 6 to 24 carbon atoms, OR, NRR', CONRR', OCOR, CN, SR, SO₂R, SO₃H, SO₃M, wherein M is an alkali metal, R and R' are the same or different and each is hydrogen, alkyl of 1 to 24 carbon atoms, haloalkyl of 1 to 24 carbon atoms, aryl of 6 to 24 carbon atoms, alkenyl of 2 to 24 carbon atoms, acyl of 1 to 24 carbon atoms, cycloalkyl of 1 to 24 carbon atoms, cycloacyl of 5 to 24 carbon atoms, aralkyl of 7 to 24 carbon atoms, or aracyl of 6 to 24 carbons atoms, and optionally with either of R₁ and R₂, R₃ and R₄, or R₄ and R₅, taken together being a part of a saturated or unsaturated fused carbocyclic ring optionally containing O, N, or S atoms in the ring;

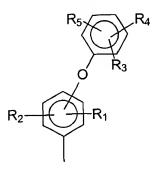
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Z' is a halogen, and W is

or a halogen.

- The compound of claim 31 wherein W is a halogen. 32. 10
 - 33. The compound of claim 31 wherein W is

TOOWSSEDEL 15



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The compound of claim 31 wherein said halogen is chlorine. 34.